March 14, 1957.

Dr. Alexander Rich National Institutes of Health Bethesda 14, Maryland

Dear Alex:

I am grateful that you sent me the reprints of your work on RNA, which certainly are suggestive that macromolecules of interesting structure are being formed.

With respect to our own work we have devoted curselved completely toward developing a procedure for the purification of the enzyme that will be adaptable to large scale operation, and that will free us of interfering enzymes that terminate the reaction prematurely. We have succeeded to the extent that our synthetic reaction results in a production of DNA that is at least equivalent to the amount with which we started. Since the enzyme preparation has an amount of contaminating nuclease in it that could reasonably account for the exhaustion of the substrate under experimental conditions, I would regard this amount of DNA as representing no intrinsic property of the system. It is tempting to stop and examine some of the properties of our more purified enzyme, but it still seems best to wait until we have more satisfactory enzyme preparations.

There is one minor point of correction with respect to a reference that is cited by Felsenfeld and Davies. The paper that was submitted concerning the E. coli phosphorylase, cited in reference 3, is by U. Z. Littauer and A. Kornberg which after a little hassling with the editors is finally in press.

With best wishes,

Sincerely yours,

AK/McK

Arthur Kornberg.